Integrating Podcasting to Enhance Public Speaking and Pedagogical Excellence of Preservice Language Communication Teachers in Ilorin Public Universities

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Research Article

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Abstract
Public speaking is an essential skill for educators, yet many preservice language teachers struggle with anxiety, limited practice opportunities, and inadequate training. This study explores the integration of podcasting as a technology-enhanced tool to improve public speaking proficiency and pedagogical excellence among preservice language teachers in public universities in Ilorin, Nigeria. A descriptive survey study design was employed, involving 457 participants, with data collected through a validated questionnaire and analyzed using descriptive statistics. The results reveal generally positive attitudes towards podcasting as an educational tool, with participants reporting improvements in speech organization, audience engagement, and independent learning skills. However, challenges such as technical barriers, insufficient internet connectivity, and lack of training persist. Despite these limitations, podcasting demonstrated significant potential in reducing speaking anxiety, fostering digital literacy, and enhancing critical thinking skills. This study highlights podcasting as a flexible and innovative medium for addressing traditional challenges in public speaking education. It contributes to the growing body of knowledge on e-learning and educational media by demonstrating how podcasting can bridge the gap between theoretical knowledge and practical application, offering a scalable and inclusive solution for teacher education. Future study should explore long-term impacts and cross-cultural comparisons to further validate these findings.

Keywords: E-learning Strategies; Podcasting in Digital Education; Educational Media Integration; Digital Literacy; Technology-Enhanced Language Learning; Public Speaking Skills

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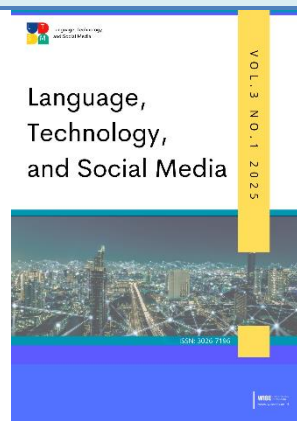
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INTRODUCTION

Public speaking is an essential skill that significantly influences personal and professional development. It involves communicating ideas effectively to an audience, engaging them while conveying messages clearly and persuasively. Public speaking skills enhance individuals' confidence, making them more adept at expressing their thoughts and ideas in various scenarios. This proficiency improves career prospects by making individuals more competitive in the job market and fosters leadership abilities, as effective communication is a cornerstone of leadership [1]. In both personal and professional settings, the ability to speak well publicly can lead to more significant influence and success, underlining the universal importance of this skill [2].

In educational settings, the development of public speaking skills is paramount. These skills prepare students for future challenges by helping them articulate thoughts in different contexts, from classroom presentations to community engagements. Public speaking improves critical thinking and organisational abilities as students learn to structure their ideas logically and present them coherently. According to Islam [3], public speaking contributes significantly to a student's academic performance and self-esteem. He added that confident speakers are often more engaged in their learning environment and can better participate in class discussions and projects. Thus, cultivating public speaking skills for future educators is essential for their academic success and personal growth.

Developing public speaking skills gives future educators a strong foundation for their future endeavours. Early exposure to public speaking helps to overcome stage fright, build confidence, and refine their communication abilities. Students who are proficient in public speaking tend to perform better academically and socially [4]. They can articulate their ideas more clearly and confidently, which enhances their participation in discussions, presentations, and group projects. This proficiency also translates to better social interactions and leadership roles, as effective communication is a critical skill in various aspects of life. Therefore, incorporating public speaking training in education is vital to promoting well-rounded, fluent, and confident individuals.

Many preservice teachers encounter problems in mastering public speaking due to anxiety, limited practice opportunities, and inadequate training. Conventional teaching approaches often emphasise rote learning and sporadic speaking assignments, which may not adequately address students' apprehensions or cultivate their proficiency [5]. To overcome these challenges, innovative teaching strategies are vital to engage students effectively and provide consistent practice in a supportive learning environment. Technology, notably podcasting, emerges as a promising tool in this regard.

Innovative teaching strategies are essential to address these challenges and promote pedagogical excellence [6]. Podcasting, for instance, offers a transformative approach to public speaking education by providing preservice teachers with a platform to create, record, and share speeches or presentations. Unlike traditional methods that may amplify students' anxiety in live settings, podcasting allows learners to record in a controlled environment, review their performances, and refine their skills iteratively [7]. This process encourages self-assessment and gradual improvement, empowering preservice teachers to build confidence at their own pace. Moreover, podcasting fosters digital literacy and critical thinking as students study topics, script content, and edit recordings, all essential skills in today's technology-driven world. Educators can enhance engagement, facilitate skill development, and prepare preservice teachers more effectively for future academic and professional challenges by adopting podcasts in Education.

Current methods of teaching public speaking in tertiary institutions often rely on traditional approaches that may not effectively engage students or address their individual needs [8]. These methods typically include occasional classroom presentations, rote memorisation, and formal speeches in front of peers. Such approaches can be intimidating and insufficient for skill development, as many students experience significant anxiety when speaking in front of an audience. This anxiety can hinder their performance and growth, and the lack of practice, feedback, or iterative learning opportunities leaves many preservice teachers with limited chances to refine their skills and graduate without the essential public speaking abilities needed for academic and professional success.

Another critical issue is engaging preservice teachers and building their confidence in public speaking. Traditional classroom environments often do not cater to all students' diverse learning styles and needs [9]. While some learners may excel with visual aids and hands-on activities, others might benefit more from auditory and digital resources. The one-size-fits-all approach can leave many students feeling disconnected and unsupported. The pressure of performing live in front of classmates can exacerbate anxiety, making it difficult for students to present effectively. This lack of confidence and engagement can lead to poor performance, low self-esteem, and a general disinterest in developing public speaking skills, which are crucial for future academic and career endeavours.

In the current digital age, integrating technology into education is essential to preparing students for the future. However, many teacher education programs still rely heavily on traditional, non-digital methods for teaching public speaking. This gap in incorporating modern technological tools and platforms means students miss opportunities to engage with innovative and interactive resources that could enhance their learning experience. Without digital tools like podcasting, students may not develop the necessary skills to navigate and utilise technology effectively, putting them at a disadvantage in a digitally driven world. This lack of technological integration also fails to tap into the potential benefits of new media in making learning more engaging and accessible.

This study aims to address these issues by exploring the integration of podcasting to enhance public speaking and the pedagogical excellence of preservice teachers in Ilorin's public universities as it offers a unique and less intimidating platform for students to practice their speaking skills, providing a private and controlled environment for recording and reviewing their work. By incorporating podcasting, this study aims to bridge the gap between traditional methods and the need for innovative modes of teaching that create a more engaging and supportive learning experience that caters to diverse learning styles and reduces anxiety.

Study Questions (RQ)

The study is guided by the following study questions:

1. What are the attitudes of preservice language communication teachers towards adopting podcasting to enhance public speaking skills in Ilorin's public universities?
2. How does the integration of podcasting influence the public speaking proficiency of preservice language communication teachers in Ilorin's public universities?
3. What are the potential benefits of podcasting to enhance the pedagogical excellence of preservice language communication teachers in Ilorin's public universities?
4. What challenges do preservice language communication teachers face when integrating podcasting into their public speaking practice in Ilorin's public universities?

LIREATURE REVIEW

Integrating podcasting in Education enhances public speaking skills and promotes pedagogical excellence, drawing on insights from various scholars regarding these critical educational concepts to ensure clarity and consistency in terminology. Podcasting in Education is viewed as a transformative tool by various scholars, offering unique advantages for enhancing learning experiences. According to Ruparelia et al. [10], podcasting provides an innovative platform for students to engage with course content beyond traditional classroom settings, facilitating flexible and self-paced learning. Rmelah and Pornwiriyakit [11] emphasise that podcasting supports auditory learners and helps reinforce material through repeated listening. Ferrer et al. [12] highlight its role in promoting active learning and critical thinking as students create and review their podcasts, fostering more profound engagement with the subject matter. Additionally, Robson [13] notes that podcasting can reduce public speaking anxiety by providing a controlled environment for practice, allowing iterative improvement, and building confidence in communication skills.

Public speaking skills are widely recognised as essential for personal and professional success, comprising various components such as clarity, engagement, and persuasiveness. According to Walker et al. [14], effective public speaking involves communicating ideas clearly and confidently, which enhances an individual's leadership potential and career prospects. Alviar et al. [15] emphasise that mastering body language, voice modulation, and audience engagement is crucial for making speeches compelling and memorable. Walker et al. [14] highlight that public speaking fosters critical thinking and organisational abilities, contributing significantly to academic performance and self-esteem. Pontillas [16] believes that early development of these skills helps overcome anxiety and builds confidence, preparing students for diverse communication challenges in personal and professional contexts.

Pedagogical excellence involves effective teaching strategies that foster student engagement, critical thinking, and holistic development. According to Chu et al. [17], it encompasses clear learning objectives, effective feedback, and a supportive learning environment that promotes student achievement. Jeschke et al. [18] emphasise the importance of teachers' deep content knowledge and the ability to adapt teaching methods to meet diverse student needs. Halimah and Sukmayadi [19] highlight the integration of content knowledge with pedagogical skills, enabling teachers to present material in ways that are accessible and engaging. Furthermore, Leong and Rethinasamy [20] advocate for reflective practice and continuous professional development as critical components of pedagogical excellence, ensuring teachers remain responsive to evolving educational demands and innovations.

Multilingualism in Language Education

Multilingualism presents challenges and opportunities in language education as educators work to meet the needs of linguistically diverse learners. According to Alisaari et al. [21], multilingual classrooms require instructional strategies that accommodate varied linguistic backgrounds, as students often have differing proficiency levels across multiple languages. This complexity can impede communication and slow progress for some learners. However, multilingualism promotes cognitive flexibility and intercultural competence, improving the educational experience [22]. Students interacting with peers from different linguistic backgrounds enhance their cultural awareness, making multilingual classrooms relevant spaces for broader learning and social development. To support this complexity, inclusive teaching strategies are vital to ensure

that students across diverse linguistic backgrounds can participate fully and develop language skills effectively.

In multilingual education, effective strategies prioritize inclusivity while promoting language acquisition. Prilutskaya [23] highlights translanguaging, a technique that allows students to use their linguistic choices to communicate, supporting comprehension and language development. For instance, teachers might encourage students to discuss ideas in their native languages before presenting them in the target language, reinforcing learning. Wang et al. [24] argue that such approaches validate students' linguistic identities and encourage active participation. Podcasting aligns with these strategies by offering learners language-rich content in multiple languages, allowing them to engage at their own level and pace will further support language acquisition in multilingual settings. This makes podcasting a promising tool for addressing linguistic diversity by providing accessible, language-specific content for all learners.

Podcasting is vital in supporting linguistically diverse learners by creating accessible, language-specific content. In multilingual contexts, podcasts offer a flexible, engaging medium for exposure to different dialects and accents, promoting familiarity and ease in language switching [25]. Podcasting also aids vocabulary acquisition and pronunciation practice, allowing students to develop language skills without immediate pressure to perform [26]. For example, students exposed to bilingual podcasts demonstrated increased confidence in both languages, as they could learn contextually and improve fluency over time, integrating new language patterns at their own pace [27]. These benefits highlight how podcasting can support personalized language learning, which is further enhanced through multilingual content design.

Podcasting supports diverse linguistic backgrounds by enabling personalized learning, making it a practical tool for multilingual classrooms. Errabo et al. [28] asserts that podcasting allows educators to provide differentiated resources that meet individual linguistic needs, facilitating language learning. Students can access episodes in their native and target languages, which promotes cross-linguistic transfer and reinforces vocabulary and comprehension. Additionally, podcasting supports self-directed learning, enabling multilingual students to practice outside the classroom, which is especially helpful in developing complex skills like pronunciation and grammar through repeated exposure [29]. With language technologies now integrated into podcasting, the potential to support multilingual learning environments becomes even more extensive.

Impact of Language Technology on Podcasting

Language technologies, such as transcription, translation tools, and voice recognition, are transforming podcasting by making content more accessible and engaging for multilingual audiences. Transcription tools, for instance, generate accurate text versions of spoken content, enabling learners to read along while listening, which enhances comprehension [30]. Translation tools extend podcast accessibility by converting transcripts into various languages, allowing a single podcast episode to reach a global audience [31]. Voice recognition technology also facilitates real-time interaction with podcast content, enabling users to search or navigate episodes more efficiently, which supports personalized and user-directed learning experiences [22].

These language technologies are vital in multilingual educational contexts, as they empower content creators to produce inclusive, multilingual content. Translation tools, for example, allow educators to deliver lessons in multiple languages, accommodating linguistic diversity in many

classrooms [32]. Meanwhile, transcription services help non-native speakers grasp vocabulary and pronunciation more effectively by providing visual cues alongside audio input [33]. These tools create a dynamic learning environment where students can interact with content in their preferred languages, enhancing accessibility and understanding.

Voice recognition technology further enables podcasting to become an interactive medium, allowing students to practice pronunciation by comparing their speech to model recordings. This form of practice aligns with the opinion of Ngo et al. [34], who note that self-monitoring through voice comparison significantly enhances pronunciation accuracy and boosts learners' confidence. Additionally, the ability to repeat and interact with audio in real time can support mastery of intonation and fluency. For multilingual learners, voice recognition adds a vital layer of engagement, enabling them to explore linguistic variation without needing constant instructor intervention, thus promoting autonomous learning [35].

Integrating language technologies into podcasting not only enhances content accessibility but also promotes active language use and production among multilingual learners. Using tools like translation and transcription, podcasts can provide learners with diverse language backgrounds and support content reinforcement through multimodal input [36]. This approach promotes an inclusive, linguistically responsive learning environment where students can navigate content based on their needs and proficiency levels [37]. Ultimately, using language technologies in podcasting serves as a bridge between different languages, making it an effective tool for supporting language acquisition across multilingual student populations. In addition to supporting multilingual learners, podcasting also serves as an essential tool in teacher education programs, where its integration encourages active learning and collaboration

Podcasting in Teacher Education Programs

Incorporating podcasting into teacher education involves strategic planning and alignment with educational goals. Educators can integrate podcasting assignments where preservice teachers create and share podcasts on various topics, promoting active learning and engagement. According to Wakefield et al. [38], collaborative projects where students work in groups to produce podcasts can foster teamwork and communication skills. Additionally, incorporating reflective podcasting assignments allows students to articulate their learning experiences and challenges, enhancing metacognitive skills [39]. Educators should provide guidelines and rubrics to ensure podcasting activities meet learning objectives and standards. Integrating podcasting into the curriculum also involves effectively training teachers on using podcasting tools, ensuring they are well-equipped to guide their students.

Various podcasting tools and platforms are well-suited for educational purposes, offering features that facilitate content creation, editing, and distribution. Audacity, for example, is a popular, accessible, open-source audio editing software that allows users to easily record and edit podcasts [40]. Anchor is another user-friendly platform that provides free podcast hosting, creation tools, and distribution to multiple podcasting services. Soundtrap by Spotify is an online collaborative platform that supports podcast creation and includes tools for remote collaboration, making it ideal for group projects. Additionally, platforms like Google Podcasts and Apple Podcasts enable easy distribution and accessibility, allowing students and educators to share their work widely and receive feedback from a broader audience [41].

Integrating podcasting into teacher education offers numerous benefits, enhancing teaching and learning experiences. Podcasting promotes active learning by requiring students to study, script, and produce content, fostering more profound engagement with the subject [42]. It also supports the development of digital literacy skills as students learn to navigate various podcasting tools and platforms. Moreover, podcasting can reduce public speaking anxiety by providing a controlled environment for practice and self-assessment, building confidence over time [16]. For educators, podcasting is an innovative teaching strategy catering to diverse learning styles, making learning more inclusive and accessible. By integrating podcasting into teacher education, institutions can prepare future teachers to effectively use technology in their classrooms, enhancing pedagogical excellence and student engagement. This focus on active listening, combined with structured feedback, creates a supportive environment where students can holistically develop their public speaking abilities within an iterative, growth-oriented framework.

Podcasting in Developing Public Speaking Skills

Podcasting enhances students' confidence and proficiency in public speaking by providing a controlled environment for practice [43]. Unlike traditional classroom settings where students may feel pressured to perform live, podcasting allows them to practice at their own pace and in their own space, reducing anxiety. This controlled setting enables repeated practice and refinement, which is vital for mastering public speaking skills. Students can record their speeches multiple times, reviewing and editing their performances to improve clarity, tone, and delivery. This iterative process fosters a safe space for learning, making it easier for students to develop and enhance their public speaking abilities without the fear of immediate judgment [44].

As students gain experience and receive constructive feedback on their podcasts, their confidence in articulating ideas will significantly grow. Feedback from peers and instructors helps students identify strengths and areas for improvement, guiding their progress [45]. This ongoing feedback loop is essential for skill development, as it provides specific, actionable insights that students can use to refine their techniques. The positive reinforcement and targeted advice received during this process boost students' self-esteem and confidence. Over time, this increased confidence translates into improved public speaking performance as students become more adept at organising their thoughts and presenting them clearly and persuasively [46].

Podcasting also promotes active listening skills, a vital component of effective communication. By engaging with their own and their peers' podcasts, students are exposed to various presentation styles and techniques [47]. This exposure helps them learn what works well and what does not, allowing them to incorporate successful strategies into their speaking practice. Active listening promotes a deeper understanding of content delivery and audience engagement, which is essential for becoming a proficient public speaker [48]. Additionally, by critically evaluating others' work, students develop analytical skills that are crucial for their improvement.

Podcasting fosters a supportive learning environment where students can develop robust public speaking skills essential for academic and professional success (Barney & Bunda, 2024). The iterative nature of podcasting, with constructive feedback and active listening, provides a comprehensive framework for continuous improvement. Students learn to speak confidently and clearly and adapt their communication style to different audiences and contexts. This holistic approach to skill development prepares students for various speaking scenarios, from classroom presentations to professional engagements [49]. Educators can equip students with the

communication skills needed to thrive academically and professionally by integrating podcasting into the curriculum.

Podcasting in Enhancing Pedagogical Excellence

Podcasting can improve teaching methods and strategies by providing a flexible and engaging platform for content delivery. Teachers can create podcasts to offer additional explanations, supplementary materials, and extended discussions, enabling students to access these resources conveniently [50]. This flexibility allows for differentiated instruction, catering to various learning paces and styles. Furthermore, creating podcasts encourages teachers to refine their communication skills, ensuring clarity and coherence in their presentations. Teachers can stay updated with current educational trends by engaging with podcasting and integrating multimedia elements, making their teaching more dynamic and effective [51].

The impact of podcasting on lesson planning and delivery is substantial. Incorporating podcasts into lesson plans requires teachers to organise their content meticulously, ensuring a logical and coherent structure [52]. This practice enhances the clarity of instruction and enables a flipped classroom model, where students can listen to lectures at home and engage in interactive activities during class. This approach maximises classroom time for discussions, problem-solving, and collaborative projects, promoting a more interactive and student-centered learning environment [53]. Additionally, podcasting allows teachers to continually update and improve their lessons, ensuring they remain relevant and engaging.

Pedagogical activities involving podcasting are diverse and innovative. Teachers can assign students to create podcasts on various topics, promoting active learning and creativity [54]. These projects can be done individually or in groups, fostering collaboration and communication skills. Teachers can also use podcasts for peer teaching, where students explain concepts to their classmates, reinforcing their understanding and enhancing their presentation skills. Moreover, podcasts can feature guest speakers or interviews with experts, providing students with valuable information and real-world perspectives that enrich their learning experience [55].

Review of Related Studies

The integration of podcasting into public speaking education is still in its early stages in Nigeria. Despite this, some initiatives and study have started exploring this area. Reviewed studies address various aspects of podcasting in Education, such as enhancing public speaking skills and pedagogical practices and investigating students' and educators' attitudes, knowledge, and preferences regarding podcasting as a teaching tool. However, these studies reveal limitations that hinder a thorough understanding of podcasting's role in educational practices. These gaps underscore the need for more comprehensive study to grasp and fully optimise podcasting's academic potential.

The study by Nova [56] explored online podcasts as a speaking activity in online classrooms in Indonesia. It aimed to understand students' perspectives on incorporating podcasts into their speaking activities through a qualitative approach with 47 English for Specific Purpose students. Data were collected via questionnaires and interviews and analysed in three stages: data reduction, data display, and conclusion drawing. Results indicated that most students viewed online podcasts positively for enhancing their speaking skills, creativity, and public speaking. However, Nova's study relies on qualitative data from a small sample, which may limit the generalizability of its

findings. The focus on English for specific purposes students and a single location also restricts the broader applicability of the results and does not consider wider pedagogical impacts or integration strategies.

Aprianto [57] examined the effect of podcasts on EFL students' learning interests by analysing their attitudes toward this medium. Using a quantitative, cross-sectional survey, the study sampled 86 university students in Indonesia. Data were collected through a questionnaire and analysed with descriptive statistics. Results showed very positive attitudes toward podcasts, citing increased engagement and proficiency. However, Aprianto's study's limitation lies in its cross-sectional design and reliance on descriptive statistics, which may not capture long-term effects or broader trends. Additionally, the focus on attitudes rather than actual learning outcomes and the specific location restricts the generalizability of the findings.

Güler and Özkan [58] investigated preservice language teachers' perceptions of podcast use in Education with 22 third-year ELT students at Cukurova University. Using a mixed-method design, data were collected through questionnaires, interviews, and reflection logs. Results showed podcasts benefited students in their methodology course, though some negative aspects were noted. The study's limitation is its small sample size and focus on a single university in Turkey, which may not represent the broader population of preservice language teachers. The limited geographic scope also restricts the generalizability of the findings to other contexts or educational settings.

Çelik [59] examined preservice teachers' opinions, self-efficacy beliefs, and state anxiety related to educational podcasting with a mixed-method approach involving 25 quantitative and 10 qualitative participants. Results showed positive opinions and increased self-efficacy despite initial anxiety. However, Çelik's study's limitations include a small sample size, which may not capture diverse perspectives or provide robust generalisations. The limited sample and geographic focus restrict the applicability of the findings to other regions and larger populations.

Ismaila and Muhammad [60] investigated lecturers' awareness, readiness, and challenges in integrating Podcasting at Sokoto State University. The study used a descriptive survey design with a sample of 95 for quantitative and 6 for qualitative data. Results indicated lecturers are unaware of podcasting but are ready to use it and are facing significant challenges. The study's limitation is the small qualitative sample, which may not provide a comprehensive understanding of the challenges. Additionally, focusing on awareness and readiness without assessing the impact on educational outcomes limits the knowledge of podcasting's effectiveness.

Sotlikova and Haerazi [61] explored students' and teachers' perceptions of podcasts in EFL classrooms at the National University of Uzbekistan. Data were collected from 40 students and 2 teachers, revealing positive attitudes and perceived improvements in language skills. However, the study's small sample size of 42 participants limits the representativeness and generalizability of the findings. Furthermore, the exclusive focus on perceptions without exploring the impact on educational outcomes constrains the understanding of podcasting's effectiveness.

METHODS

This study employed a descriptive survey study design to evaluate preservice language communication teachers' perceptions of integrating podcasting into public speaking education at public universities in Ilorin, Kwara State. This design facilitated the collection of data to describe the characteristics of the population, aligning with the study's objectives. Descriptive survey study, as outlined by Wang et al. [62], involves gathering representative data from a sample of a larger

population and using the sample to infer the characteristics of the population. A quantitative approach was adopted to provide a deeper understanding of preservice teachers' attitudes toward incorporating podcasting into their pedagogical practices.

Population and Sampling

The target population for this study comprised preservice language communication teachers enrolled in undergraduate English language education programs within the Department of Arts and Social Science Education, Faculty of Education, at two public universities in Ilorin (referred to as University A and University B). These institutions host 276 and 193 preservice teachers, respectively, yielding a total population of 469 respondents. Given the relatively manageable size of the population, the studyers opted for a census sampling approach, involving the entire population as the sample. This decision aligns with the recommendations of Ahmad et al. [63], who emphasized that utilizing the whole population in small-scale studies enhances the comprehensiveness and minimizes sampling errors. This inclusive sampling approach allowed for a thorough exploration of podcasting integration in public speaking education.

Data Collection Instrument

The data collection instrument used in this study was the Podcast Integration Survey (PIS), a self-designed questionnaire developed to gather responses on the integration of podcasting to enhance public speaking skills and pedagogical effectiveness. The PIS comprised a four-point Likert scale ranging from "Strongly Disagree" (SD) to "Strongly Agree" (SA), structured into five distinct sections:

- Section A : Collecting demographic data of respondents.
- Sections B–E : Exploring attitudes toward podcasting, its impact on public speaking proficiency, its potential pedagogical benefits, and the challenges associated with its implementation.

This structured instrument ensured a comprehensive collection of data to address the study questions effectively.

Instrument Validation

The Podcast Integration Survey (PIS) underwent a rigorous validation process conducted by measurement and evaluation experts to ensure its reliability and validity. Experts critically reviewed the initial 40-item questionnaire for content accuracy and relevance to the study objectives. Items deemed redundant or irrelevant were eliminated, resulting in a refined instrument with strong content validity. This meticulous validation process ensured the alignment of the instrument with the study's core variables, establishing its suitability for collecting relevant data on podcasting integration and its pedagogical impact.

Reliability Testing

To establish the reliability of the PIS, a pilot study was conducted at Usmanu Danfodiyo University, Sokoto, involving 30 randomly selected students. The data from the pilot study were analyzed using the Cronbach's Alpha reliability test, which produced a reliability coefficient of 0.913. This high coefficient indicates that the instrument consistently measures the intended constructs. As Octafia et al. [64] stated, a reliability coefficient closer to 1 denotes higher reliability, while values closer

to 0 indicate lower reliability. The findings affirmed that the PIS is a reliable tool for assessing the integration of podcasting in enhancing public speaking skills and pedagogical practices.

Data Analysis

The collected data were analyzed using the Statistical Package for Social Sciences (SPSS) software. The analysis process included:

- Descriptive statistics: Frequencies, percentages, means, and standard deviations were used to describe the respondents' demographic characteristics and address the study questions.
- Weighted average analysis: Each statement was evaluated against a weighted average to interpret respondents' levels of satisfaction or dissatisfaction with podcasting integration. Responses scoring below the weighted average indicated areas requiring intervention, while scores above the average highlighted positive perceptions.

Out of the 469 distributed instruments, 457 were retrieved and deemed valid for analysis, with 3 invalid responses and 9 missing questionnaires.

RESULTS AND DISCUSSION

Demographic Characteristics

The following provides a detailed breakdown of the sample population's demographic characteristics, including gender and age distribution. These demographic insights are valuable for academic planning, resource allocation, and targeted interventions within the educational institution. The demographic analysis of the study shows that out of 457 preservice language communication teachers in Ilorin's public universities, 47.5% are male, and 52.5% are female. Regarding age distribution, most participants fall within the 21-25 age range (65.2%), followed by those aged 15-20 (23.2%). Smaller percentages are seen in the 26-30 (8.8%), 31-35 (2.4%), and 36-40 (0.4%) age groups. These findings indicate a relatively young cohort with a balanced gender distribution, providing a diverse perspective on podcasting adoption and its impact on public speaking skills.

Descriptive Analysis

This section presents the table containing all items used to measure the first study objective. The study question was analysed using descriptive statistics, specifically the mean, as shown in Table 1.

Table 1. Attitudes Towards Adopting Podcasting (n = 457)

No	Statement	N	Mean	Std. Deviation	Remark
1	I believe podcasts are an effective tool for learning public speaking.	457	2.89	1.059	High
2	I am willing to incorporate podcasts into my daily study routine.	457	2.95	1.006	High
3	I feel motivated to improve my public speaking skills through podcasts.	457	2.77	.953	Low
4	Using podcasts can make learning public speaking more enjoyable.	457	2.75	.941	Low
5	I am confident in my ability to learn public speaking through podcasts.	457	2.97	1.005	High
6	Podcasts are a valuable resource for improving my communication skills.	457	2.92	1.017	High

7	I prefer learning public speaking through podcasts over traditional methods.	457	2.97	.996	High
8	Podcasts can help me stay updated with the latest trends in public speaking.	457	2.73	.998	Low
9	I find it easy to access and listen to podcasts regularly.	457	2.79	.960	Low
10	I am open to using podcasts as a supplementary learning tool.	457	2.96	1.022	High
	Weighted Average		2.88		

Source: Field Survey, 2024.

The analysis of preservice language communication teachers' attitudes towards adopting podcasting to enhance public speaking skills in Ilorin's public universities reveals generally positive perceptions. Statements such as "I believe podcasts are an effective tool for learning public speaking" (Mean = 2.89), "I am willing to incorporate podcasts into my daily study routine" (Mean = 2.95), and "I am confident in my ability to learn public speaking through podcasts" (Mean = 2.97) received high mean scores, indicating strong agreement. However, some aspects, like the enjoyment of learning public speaking through podcasts (Mean = 2.75) and staying updated with trends via podcasts (Mean = 2.73), received lower scores. The weighted average of 2.89 reflects a favourable attitude toward podcast adoption for enhancing public speaking skills. This section includes a table with all the items used to measure the second study objective. Descriptive statistics, specifically the mean, were employed to analyse the study question, as presented in Table 2.

Table 2. Influence of Podcasting on Public Speaking Proficiency (n = 457)

No	Statement	N	Mean	Std. Deviation	Remark
1	Listening to podcasts has improved my pronunciation.	457	2.80	1.015	Low
2	Podcasts have helped me develop better speech delivery techniques.	457	2.83	.950	Low
3	Podcasts have improved my understanding of speech organisation.	457	2.90	.951	High
4	Podcasts have taught me how to engage an audience effectively.	457	2.88	.917	High
5	I can structure my speeches better after learning from podcasts.	457	2.79	.987	Low
6	Podcasts have helped me manage my speaking anxiety.	457	2.82	.951	Low
7	I have gained insights into effective body language from podcasts.	457	2.86	.921	High
8	Podcasts have taught me how to handle different types of audiences.	457	2.91	.870	High
9	I can evaluate my public speaking skills better after using podcasts.	457	2.77	.942	Low
10	Podcasts have improved my overall public speaking proficiency.	457	2.89	.967	High
	Weighted Average		2.85		

Source: Field Survey, 2024.

The analysis of how podcasting influences the public speaking proficiency of preservice language communication teachers in Ilorin's public universities shows mixed results. High mean scores were noted in areas such as improved understanding of speech organisation (Mean = 2.90), learning to engage audiences effectively (Mean = 2.88), and handling different types of audiences (Mean = 2.91). These indicate the positive impacts of podcasting on specific public speaking skills. However, areas like pronunciation improvement (Mean = 2.80), better speech delivery techniques (Mean = 2.83), and managing speaking anxiety (Mean = 2.82) received lower mean scores, suggesting room for improvement. The weighted average of 2.85 reflects a generally positive but varied influence of podcasting on public speaking proficiency. This section presents a table that includes all the items used to measure the third study objective. The study question was analysed using descriptive statistics, specifically the mean as presented in Table 3.

Table 3. Potential Benefits of Podcasting for Pedagogical Excellence (n = 457)

No	Statement	N	Mean	Std. Deviation	Remark
1	Podcasts can make learning more flexible and accessible.	457	2.80	1.015	Low
2	They can enhance the traditional classroom learning experience.	457	2.83	.950	Low
3	Podcasts can provide additional resources beyond textbooks.	457	2.90	.951	High
4	They can help develop independent learning skills.	457	2.88	.917	High
5	Podcasts can cater to different learning styles.	457	2.79	.987	Low
6	Podcasts can be a valuable tool for revision.	457	2.82	.951	Low
7	Podcasts can enhance critical thinking and analytical skills.	457	2.86	.921	High
8	They can provide diverse perspectives on educational content.	457	2.91	.870	High
9	They can help reinforce key concepts learned in class.	457	2.77	.942	Low
10	Podcasts can contribute to overall academic success.	457	2.89	.967	High
	Weighted Average		2.85		

Source: Field Survey, 2024.

The analysis of the potential benefits of podcasting to enhance the pedagogical excellence of preservice language communication teachers in Ilorin's public universities reveals a generally positive but varied impact. Higher mean scores were recorded for statements indicating that podcasts can provide additional resources beyond textbooks (Mean = 2.90), help develop independent learning skills (Mean = 2.88), enhance critical thinking and analytical skills (Mean = 2.86), and provide diverse perspectives on educational content (Mean = 2.91). These benefits suggest podcasts can significantly contribute to pedagogical excellence. However, lower mean scores in areas like making learning more flexible and accessible (Mean = 2.80) and catering to different learning styles (Mean = 2.79) indicate areas for further improvement. The weighted average of 2.85 suggests that while podcasting has substantial benefits, its full potential is yet to be

realised. This section presents the table containing all the items used to measure the fourth objective. The study question was analysed using Descriptive statistics of Mean as presented in Table 4.

Table 4. Challenges in Integrating podcasting (n = 457)

No	Statement	N	Mean	Std. Deviation	Remark
1	Lack of access to high-quality recording equipment.	457	2.56	.951	Low
2	Insufficient technical support for podcasting activities.	457	2.70	.939	Moderate
3	Resistance from educators to adopt new teaching methods.	457	2.67	.946	Low
4	Lack of time for planning and creating podcasts.	457	2.80	.970	High
5	Insufficient internet connectivity for streaming or downloading podcasts.	457	2.74	.902	High
6	Technical difficulties during podcast production.	457	2.74	.972	High
7	Lack of training for educators on using podcasts.	457	2.76	.887	High
8	Resistance from students to adopt new learning methods.	457	2.71	.905	High
9	Cost of accessing or producing quality podcasts.	457	2.78	.923	High
10	Difficulty in keeping students engaged through podcasts.	457	2.56	1.014	Low
	Weighted Average		2.7		

Source: Field Survey, 2024.

The analysis of the challenges preservice language communication teachers face when integrating podcasting into their public speaking practice in Ilorin's public universities highlights several significant issues. High mean scores indicate major challenges, including lack of time for planning and creating podcasts (Mean = 2.80), insufficient internet connectivity (Mean = 2.74), technical difficulties during podcast production (Mean = 2.74), lack of training for educators (Mean = 2.76), resistance from students to new learning methods (Mean = 2.71), and cost of accessing or producing quality podcasts (Mean = 2.78). Lower mean scores point to less severe issues like lack of access to high-quality recording equipment (Mean = 2.56) and resistance from educators to adopt new teaching methods (Mean = 2.67). The overall weighted average of 2.7 suggests that while there are notable challenges, there are areas where improvements could facilitate better integration of podcasting in public speaking practice.

Discussion
The findings of this study significantly contribute to the existing body of knowledge on integrating podcasting in public speaking education, particularly within the Nigerian educational context. The discussion is structured according to the study questions and objectives. The preservice teachers in this study exhibited generally positive attitudes towards adopting podcasting, recognising it as an effective tool for enhancing learning, particularly in public speaking and pedagogical practices. This aligns with Aprianto [57], who similarly found that EFL students in Indonesia held favourable views on the use of podcasts, citing increased engagement and learning proficiency. However, while Aprianto's study was constrained by a relatively small sample size of 86 respondents and a

specific educational context, this study utilises a more extensive and diverse sample, strengthening the findings' validity and generalizability. The larger sample size and broader context of this study contribute to a more comprehensive understanding of podcasting's potential in educational settings.

The analysis of podcasting's influence on public speaking proficiency presents a detailed picture. While participants showed significant improvements in understanding speech organisation and effectively engaging audiences, challenges persist in pronunciation and managing speaking anxiety. This resonates with the findings of Güler and Özkan [58], who observed both positive outcomes and limitations in podcast use among preservice language teachers. However, Güler and Özkan's study was limited by a small sample size and its focus on a single university, which restricts the generalizability of their findings. In contrast, with its more extensive and diverse sample, this study offers a more comprehensive view, providing deeper insights into the benefits and challenges of podcasting in enhancing public speaking proficiency.

The potential benefits of podcasting for pedagogical excellence are highlighted by significant advantages such as providing additional resources, fostering independent learning, and enhancing critical thinking. These findings align with Çelik [59], who observed the positive impacts of podcasting on self-efficacy and anxiety reduction among preservice teachers. However, Çelik's study was constrained by a small sample size and a narrow focus on self-efficacy and anxiety. In contrast, this study offers a more extensive evaluation of podcasting's pedagogical benefits. By including a more extensive and diverse sample and examining a more comprehensive range of factors, such as critical thinking and resource accessibility, this study provides a more comprehensive understanding of how podcasting can enhance teaching and learning practices.

The challenges identified in integrating podcasting, such as lack of time for planning, insufficient internet connectivity, and technical difficulties, are significant barriers. This finding aligns with Ismaila and Muhammad [60], who reported similar challenges among lecturers in Sokoto State University. However, Ismaila and Muhammad's study was limited by a small qualitative sample and a focus on lecturer awareness and readiness without assessing the impact on the educational outcomes of students. In contrast, this study addresses these limitations by focusing exclusively on students' perspectives and evaluating the effect on academic outcomes. This approach provides a more comprehensive understanding of the barriers to podcast integration from the student viewpoint, highlighting specific challenges and their impact on learning.

CONCLUSION

This study demonstrates the significant potential of podcasting in enhancing public speaking skills and overall pedagogical excellence among preservice language communication teachers. The findings indicate that podcasting positively impacts various aspects of public speaking, notably by improving speech organization, audience engagement, and overall communication competence. Additionally, podcasting promotes independent learning and critical thinking, offering preservice teachers practical experience in skills vital for effective teaching. Despite these benefits, the study identifies key challenges, including limited time, technical difficulties, and inadequate internet access, which can inhibit successful podcast integration. Addressing these challenges is vital for fully realizing the educational potential of podcasting. Compared to previous studies, which often focused on limited contexts or smaller samples, this study utilized a more extensive and diverse sample, providing a broader and more reliable analysis. This approach enhances the generalizability of the findings, making the insights applicable across different educational settings and highlighting podcasting as an adaptable tool for academic improvement. To optimize the use of podcasting in teacher education, this study recommends expanding access to reliable internet and establishing dedicated technical support within educational institutions. Additionally, targeted podcast production and usage training is suggested to empower preservice teachers to use podcasting

confidently and effectively. These strategies aim to enhance the usability of podcasts in educational contexts, thereby supporting pedagogical goals and professional skill development for future educators. The study underscores the need for continued investment and innovation in educational technologies like podcasting, encouraging policymakers and educators to adopt tailored approaches that address specific institutional challenges. Institutions can create more dynamic and engaging learning environments by prioritizing solutions to these barriers and enhancing podcasting's integration into teacher education. Ultimately, embracing podcasting's potential will contribute to an improved educational experience, equipping preservice teachers with essential skills for success in their future careers and strengthening overall education quality.

LIMITATIONS

Despite the promising results of this study, several limitations should be considered. Firstly, the sample was confined to preservice language communication teachers from two public universities in Ilorin, Nigeria, which may limit the generalizability of the findings to other regions or educational contexts. Additionally, the study primarily relied on self-reported data, which can introduce response bias and may not fully reflect the actual impact of podcasting on public speaking skills. Furthermore, the study focused on short-term effects and did not account for the long-term impact of podcasting integration in public speaking education. Finally, technical challenges such as insufficient internet connectivity, lack of access to high-quality recording equipment, and limited training for educators on podcasting tools were identified as barriers, which may have influenced the successful integration of podcasting in some cases.

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AUTHOR CONTRIBUTION

The authors collaboratively contributed to the development and completion of this study. U.A., as the first author, played a pivotal role in conceiving and designing the study, conducting an extensive literature review, and developing the theoretical framework. U.A. also drafted the manuscript,

covering the introduction, methodology, results, and discussion sections, while coordinating data collection, analysis, and interpretation of the study's findings. Additionally, U.A served as the primary correspondent with the journal, managing the submission and revision processes. A. K. S., the second author, significantly contributed to refining the study's methodology and provided critical feedback on the literature review and discussion sections. A. K. S. also assisted in the analysis and interpretation of findings and actively participated in the revision process, ensuring alignment with reviewers' comments. H. I., the third author, offered technical expertise on podcasting tools and technologies and supported data collection by ensuring the validity and reliability of the survey instrument. Furthermore, H. I. reviewed and edited the manuscript to enhance clarity, coherence, and academic rigor, contributing to the preparation of the final manuscript for submission. All authors have read and approved the final version of the manuscript, which reflects the collaborative effort throughout the study.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

DECLARATION OF USE OF AI IN SCIENTIFIC WRITING

The authors used ChatGPT during the preparation of this work to improve grammar and enhance language clarity. After utilizing the tool, the authors thoroughly reviewed and edited the content as necessary and assumed full responsibility for the publication's content.

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